## BUSINESS MEETING

## BEFORE THE

# CALIFORNIA ENERGY COMMISSION

In the Matter of:	)
Business Meeting	)
	,

CALIFORNIA ENERGY COMMISSION

HEARING ROOM A

1516 NINTH STREET

SACRAMENTO, CALIFORNIA

WEDNESDAY, JULY 14, 2010 10:00 A.M.

Reported by: Peter Petty

#### COMMISSIONERS PRESENT

Karen Douglas, Chair

Jeffrey D. Byron

Anthony Eggert

Robert Weisenmiller

## STAFF PRESENT

Melissa Jones, Executive Director Michael Levy, Chief Counsel Jennifer Jennings, Public Advisor Harriet Kallemeyn, Secretariat

	Item No.
Guido Franco	2
Philip Misemer	3
Joe O'Hagan	4
Erik Stokes	5
Rizaldo Aldas	6
David Weightman	7
Anish Gautam	8
Donald Kazama	9
Paul Kramer	11
Tara Garcia	14

#### Also Present

## Public Comment

Rachel Koss, Attorney representing CURE Scott Galati, Galati & Blek David Singleton, Native American Heritage Commission Michael Boyd, CARE Ella Gannon, Attorney representing Tessera Solar, North America

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#### Items

#### 1. CONSENT CALENDAR.

- A. ROBERT J. WATSON ENTERPRISES, INC., DBA RESOLUTION. Possible approval of a no-cost time extension to Contract 150-08-003 with Robert J. Watson Enterprises, Inc., DBA Resolution, to provide training for Energy Commission staff. The time extension is needed to accommodate staff unable to complete the training due to workload issues.
- 2. CALIFORNIA INSTITUTE FOR ENERGY AND ENVIRONMENT. Possible approval of Contract 500-10-007 for \$549,975 with the Regents of the University of California, California Institute for Energy and Environment to further develop a public Web-based interactive visualization tool that will reveal potential climate impacts at the local, regional, and state levels. (PIER electricity funding.)
- 3. CALIFORNIA INSTITUTE FOR ENERGY AND ENVIRONMENT.

  Possible approval of PIER Work Authorization MRA-02-086 with the Regents of the University of California,

  California Institute for Energy and Environment, for \$200,000 to determine the magnitude of regulatory, policy, market, or technology barriers to transportation electric fuel implementation in California. (PIER funding.)
- 4. UNIVERSITY OF CALIFORNIA, BERKELEY. Possible approval of an amendment to Work Authorization UC MRA-048-02 under contract 500-02-004 with the Regents of the University of California, Berkeley, California Institute for Energy and Environment for \$160,000 and three months additional time to expand the Water Energy Sustainability Tool's capabilities to address water supply issues and also improve user access to the model by making it Web-based. (PIER electricity funding.)

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- 5. UNIVERSITY OF CALIFORNIA, LOS ANGELES. Possible approval 20 of Contract 500-10-009 for \$550,000 with the Regents of the University of California, Los Angeles, to develop a method for estimating the energy and environmental impacts of community-scale changes on urban transportation systems. (PIER electricity funding.)
- 6. UNIVERSITY OF CALIFORNIA, IRVINE. Possible approval of
  Contract 500-10-010 for \$300,000 with the Regents of the
  University of California, Irvine, to develop and
  demonstrate innovative methods and technology for
  controlling the dispatch of combined cooling, heating,
  and power systems on light industrial, commercial, and
  institutional applications. This contract represents a
  cost-share fund to the U.S. Department of Energy under a
  \$1.282 million American Recovery and Reinvestment Act
  award. (PIER electricity funding.)
- 7. E SOURCE COMPANIES, LLC. Possible approval of Contract 26 500-10-013 for \$499,049 with E Source Companies, LLC, to prepare a series of technical briefs that describe the results of PIER technologies and disseminate them to professional and technical journals, websites, and at relevant conferences. (PIER electricity funding.)
- 8. PREMIUM POWER CORPORATION. Possible approval of Grant 31 Agreement PIR-10-001, awarding \$394,082 to Premium Power Corporation to demonstrate the load management and peak-shaving performance of a 100-kilowatt/150 kilowatt hour zinc-bromide energy storage system connected on the customer side of the meter. (PIER electricity funding.)
- 9. GAS TECHNOLOGY INSTITTUTE. Possible approval of Grant
  Agreement PIR-10-002 awarding \$399,973 to Gas Technology
  Institute to demonstrate medium temperature non-tracking
  solar collectors in an industrial setting. This project
  is to displace natural gas and electricity use while
  improving energy efficiency and reducing greenhouse gas
  emissions. (PIER natural gas funding.)

#### Items

- 10. (This Item is Moved to a Future Agenda) RENEWABLES PORTFOLIO STANDARD 2006 PROCUREMENT VERIFICATION REPORT. Possible approval of the Renewables Portfolio Standard (RPS) 2006 Procurement Verification Report. This report transmits the RPS procurement verification findings for 2001-2006 to the California Public Utilities Commission.
- 11. CONSOLIDATED HEARING ON ISSUES CONCERNING U.S. BUREAU
  OF LAND MANAGEMENT CULTURAL RESOURCES DATA (10-CRD-1).
  Possible adoption of Proposed Decision of the Siting
  Committee on issues concerning U.S. Bureau of Land
  Management (BLM) cultural resources data. This
  proceeding consolidated the applications for certification
  of the Imperial Valley (SES Solar Two) Project (08-AFC-5),
  the Calico Solar (SES Solar One) Project (08-AFC-13),
  the Solar Millennium Blythe, Project (09-AFC-6), the
  Solar Millennium Palen Project (09-AFC-7), the Genesis
  Solar Energy Project (09-AFC-8), and the Solar Millennium
  Ridgecrest Project (09-AFC-9), for the limited purpose of
  examining intervenors' access to confidential data regarding
  cultural resources on BLM land.
- 12. Minutes: Approval of the June 30, 2010, Business Meeting 63 Minutes.
- 13. Commission Committee Presentations and Discussion.
- 14. Chief Counsel's Report:
  - a. California Communities Against Toxics et al v. South Coast Air Quality Management District (Los Angeles County Superior Court, BS124624);
  - b. Western Riverside Council of Governments v. Department of General Services (Riverside County Superior Court RIC10005849);
  - c. In the Matter of U.S. Department of Energy (High Level Waste Repository), (Atomic Safety Licensing Board, CAB-04, 63-001-HLW).

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14.	Chief Counsel's Report (Continued):	
	d. Public Utilities Commission of California (Federal Energy Regulatory Commission, Docket No. EL10-64-000); and Southern California Edison Company, et al. (Federal Energy Regulatory Commission, Docket No. EL10-66-000).	
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- 2 July 14, 2010 10:04 a.m.
- 3 CHAIRPERSON DOUGLAS: Good morning. Welcome to
- 4 the California Energy Commission Business Meeting of
- 5 July 14<sup>th</sup>, 2010.
- 6 Please join me in the Pledge.
- 7 (Whereupon, the Pledge of Allegiance was
- 8 received in unison.)
- 9 CHAIRPERSON DOUGLAS: One change to the Agenda,
- 10 Commissioners. Item 10 will be pulled and set for a
- 11 future business meeting.
- 12 Item 1. Consent Calendar.
- 13 COMMISSIONER BYRON: Madam Chair, I move
- 14 approval of the Consent Calendar.
- 15 COMMISSIONER EGGERT: Second.
- 16 CHAIRMAN DOUGLAS: All in favor?
- 17 (Ayes.)
- 18 Item 1 is approved.
- 19 Item 2. California Institute for Energy and
- 20 Environment. Possible approval of Contract 500-10-007 for
- 21 \$549,975 with the Regents of the University of California,
- 22 California Institute for Energy and Environment. Mr. Franco.
- MR. FRANCO: Good morning, Commissioners. My name is
- 24 Guido Franco. I am with the Energy Commission's Public
- 25 Interest Energy Research Program. As you know, the PIER

- 1 Program enhances and compliments national and inter-
- 2 national research programs on climate change, generating a
- 3 specific analysis for California. And our programs have been
- 4 successful in the sense of they have informed climate change
- 5 policy in California, and also are being used for long term
- 6 planning at the statewide level. However, our resources are
- 7 still being under-utilized for multiple reasons. For example,
- 8 the PIER Program has generated climate SNAs [phonetic] for
- 9 California, with a high level of temporal on a daily basis, and
- 10 geographical resolution, and this is our grid sizes are in the
- 11 order by seven miles governing our state. So, the information
- 12 could be used by local agencies for their long term planning or
- 13 activities. For that reason, we engage in [inaudible] [2:24]
- 14 project with Google Earth and in conjunction with the Resources
- 15 Agencies, we will develop a prototype Website, known as
- 16 CalAdapt Website.
- 17 The CalAdapt Website is using Google Earth as its
- 18 main engine to allow us to effectively show and transfer what
- 19 we have produced in our climate change projects. For example,
- 20 the [inaudible], you know, uses can go any way in California,
- 21 climate and historical climate, and climate projections, any
- 22 way in California, and again, the grid size of 7 X 7 miles.
- 23 So, the purpose of this contract is to continue improving the
- 24 CalAdapt Website, and we use this Website as our main tool to
- 25 transfer the climate change resources to local and regional

- 1 entities, to allow them to more effectively utilize our
- 2 resources for long term planning at the local and regional
- 3 scales. So, with that, I respectfully request your approval
- 4 for this interagency agreement. I am also ready to answer any
- 5 questions that you may have.
- 6 COMMISSIONER EGGERT: I will start here. I have had
- 7 a little bit of exposure to this project and I think it is a
- 8 really exciting initiative, particularly, I think, in your
- 9 choice of Google Earth as a platform, you know, one that is
- 10 potentially available to the whole world, is an excellent
- 11 choice. And actually, one question I have is whether or not
- 12 this tool can be adapted to other states and even other
- 13 countries in terms of the methodologies that are applied?
- MR. FRANCO: Yes. With Google Earth, I mean, one
- 15 reason Google Earth is interested to work with us is because
- 16 they see it as a prototype that will be used for other states
- 17 and other nations, and we also inform our talks with NOAA, the
- 18 National Oceanic and Atmospheric Association.
- 19 COMMISSIONER EGGERT: And I know also, having had
- 20 conversations in my previous job with local jurisdictions, one
- 21 of the key challenges was this lack of information at the sort
- 22 of regional and even local level, in terms of the spatial
- 23 accuracy of the expectations and the scenarios for the
- 24 different climate change impacts. Do you know, has this
- 25 actually been put to use yet within any of the local

- 1 jurisdictions' planning activities, or if any of them
- 2 are planning to do so in the near future?
- 3 MR. FRANCO: The prototype website contains just a
- 4 subset of the data, and only monthly data, so I am not aware of
- 5 anybody using it, but local agencies have become more aware of
- 6 what we are doing, so there are now direct links between some
- 7 local agencies and our researchers, so that is the way they are
- 8 getting the same information. But, our hope is that eventually
- 9 this Google and CalAdapt Website would allow a faster and more
- 10 efficient transfer of information.
- 11 COMMISSIONER EGGERT: This is the project that was
- 12 also worked on in concurrence with Stockholm Environmental
- 13 Institute?
- MR. FRANCO: Yes.
- 15 COMMISSIONER EGGERT: So, no, I think this is a
- 16 phenomenal project. I think, you know, another example of
- 17 California leading the way, specifically in this case on
- 18 adaptation strategy. So, I think you have done a great job
- 19 here.
- 20 COMMISSIONER BYRON: Mr. Franco, I was on the website
- 21 last night. I was reminded about the video that the Governor,
- 22 of course, narrates that is on there, and this is in response
- 23 to a mandate from his Executive Order. I think it is a very
- 24 timely and well put together project. I would like to thank
- 25 you for bringing this to us.

- 1 MR. FRANCO: Thank you.
- 2 COMMISSIONER EGGERT: I will move the item.
- 3 COMMISSIONER BYRON: Second.
- 4 CHAIRMAN DOUGLAS: All in favor?
- 5 (Ayes.)
- 6 Item 2 is approved. Thank you, Mr. Franco.
- 7 Item 3. California Institute For Energy And
- 8 Environment. Possible approval of PIER Work Authorization MRA-
- 9 02-086 with the Regents of the University of California,
- 10 California Institute for Energy and Environment, for
- 11 \$200,000 to determine the magnitude of regulatory, policy,
- 12 market, or technology barriers to transportation electric
- 13 fuel implementation in California. Mr. Misemer.
- MR. MISEMER: Good morning, Chairman Douglas and
- 15 Commissioners. My name is Philip Misemer and I work in the
- 16 Energy Resource and Development Division in Transportation
- 17 Research. The project before you is a continuation, or I
- 18 should say, it builds upon a previous project done with the
- 19 same researchers. In that project, we examined business models
- 20 for reducing the use of traction batteries in electric vehicles
- 21 through second use applications. In this particular research,
- 22 we will continue with some of the findings of that earlier
- 23 White Paper, specifically in regard to the intersections of the
- 24 transportation or electric vehicle electric fuel, and our
- 25 current regulatory policy structures with respect to

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- 2 very interesting confluences of the technology advancements,
- 3 particularly with regard to directions we are heading with the
- 4 Smart Grid and demand response, and how we are going to
- 5 effectively supply what could be vast amounts of energy to this
- 6 new mode of transportation. This work is scheduled to complete
- 7 approximately March of next year. And I am also pleased to say
- 8 that, in discussions with Commissioner Eggert, we think that
- 9 the work will feed in excellently with the new electric vehicle
- 10 collaborator that has been formed at the U.C. Davis
- 11 Transportation Institute. If I can answer any questions?
- 12 COMMISSIONER EGGERT: So, I will make a comment, and
- 13 thank you, Philip, and, yeah, we did have a good discussion
- 14 about this project the other day, and I agree, I think
- 15 particularly some of the tasks, including looking at the near
- 16 term picture of electric vehicle and infrastructure scale-up in
- 17 California is going to be particularly useful for further
- 18 refining our planning activities, including under 118, as we
- 19 develop that program with respect to our strategic investments
- 20 in electric vehicles, electric vehicle infrastructure, battery
- 21 second life applications, etc. And I am familiar with this
- 22 team at U.C. Berkeley, I think they do great work. So, I am
- 23 very encouraged to see that this program is continuing and
- 24 adapting to our policy needs, as we sort of watch this market
- 25 emerge within the state. And I think, given its potential for

- 1 greenhouse gas reductions, petroleum reductions, air
- 2 quality benefits, I think providing the research that is going
- 3 to support these strategies is critically important, and look
- 4 forward to seeing the results of this study.
- 5 COMMISSIONER BYRON: Quick comment. I have had the
- 6 benefit of having a couple of briefings recently from Mr.
- 7 Misemer and they were excellent. I do not get the benefit,
- 8 obviously, of getting to sit in the Transportation Committee
- 9 meetings all the time, and so it was a good update for me.
- 10 Phil, I can tell, you are extremely passionate about these
- 11 subject areas, and it is a tremendous asset to have you here at
- 12 this Commission. Another good research project. But, I
- 13 encourage you to continue to work more and more closely with
- 14 the Transportation Division, as well, on all these great
- 15 activities that you are doing and I note that you will have an
- 16 Advisory Committee well, let's see, it says you will have a
- 17 stakeholder workshop.
- 18 MR. MISEMER: Yes.
- 19 COMMISSIONER BYRON: And you will have the agencies
- 20 involved and utilities. Will it include publicly owned
- 21 utilities, as well?
- MR. MISEMER: We hope. They can be a bit independent
- 23 in this regard, but certainly we have a high degree of interest
- 24 from utilities such as SMUD, and we would expect them to join
- 25 us. The others, we hope.

- 1 COMMISSIONER BYRON: Okay. I do, too. I am
- 2 certainly in favor of the project. If Commissioner
- 3 Weisenmiller does not have any comments, I will go ahead and
- 4 move approval of the item.
- 5 COMMISSIONER EGGERT: Second.
- 6 CHAIRMAN DOUGLAS: All in favor?
- 7 (Ayes.)
- 8 This item is approved.
- 9 MR. MISEMER: Thank you.
- 10 CHAIRMAN DOUGLAS: Thank you.
- 11 Item 4. University Of California, Berkeley.
- 12 Possible approval of an amendment to Work Authorization UC MRA-
- 048-02 under contract 500-02-004 with the Regents of the
- 14 University of California, Berkeley, California Institute for
- 15 Energy and Environment for \$160,000 and three months additional
- 16 time. Mr. O'Hagan.
- MR. O'HAGAN: Good morning, Commissioners. My name
- 18 is Joe O'Hagan. I am in the PIER Program, as well. The
- 19 proposed amendment before you is to add additional funding and
- 20 a small amount of time to an existing Work Authorization under
- 21 the U.C. Master Research Agreement. The existing contract is
- 22 for the development and refinement of the Water Energy
- 23 Sustainability Tool, which is a decision support model to allow
- 24 users to be able to understand the energy demand and
- 25 environmental consequences of alternative management strategies

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- 2 that would include infrastructure development, as well. The
- 3 West Model is a lifecycle-based model, so it looks at material
- 4 preparation, PVC pipe or concrete, actual construction
- 5 activities, operation, and maintenance, it does not address
- 6 decommissioning of facilities. The model addresses, as I said,
- 7 both water and wastewater treatment. The model is an Excel-
- 8 based model at this time, with separate modules for the
- 9 different aspects of the safer wastewater or water supply. The
- 10 proposed amendment would be to fund making the model a Web-
- 11 based tool that would be comprehensive, including all aspects,
- 12 allow users to select from different values, or insert their
- 13 own values, for the different criteria they are evaluating. It
- 14 would also provide for the researchers an opportunity for
- 15 continuing input from people using the model, to do further
- 16 improvements. The model would be posted on a U.C. Berkeley
- 17 Website, the researchers have had a website for this model
- 18 since 2004, which has not been funded by the Energy Commission,
- 19 and they have promised to continue placing the model actually
- 20 on the Website, instead of just a description, and continually
- 21 maintain and update this model. So, they are making a long
- 22 term commitment for support.
- 23 Another aspect of the proposed amendment is to add an
- 24 aspect where you can address the stress for water demand from
- 25 different management options. Right now, the model, as with

- 1 most lifecycle models, only looks at water volume, just
- 2 as if you are doing relative comparisons, it is just comparing
- 3 total amounts. This module would actually allow you to
- 4 evaluate the stresses of those amounts in regard to the local
- 5 water supplies, where the water would be obtained.
- 6 And then the third aspect of the amendment would be
- 7 to collect additional information on energy and water, in
- 8 particular, the water footprint at different energy sources, to
- 9 not only inform this model, but also other research and looking
- 10 at how fuels and energy in California may change in the future.
- 11 And with that, I am available for any questions.
- 12 COMMISSIONER EGGERT: Thank you. I am a huge fan of
- 13 lifecycle assessments. I think they can be incredibly valuable
- 14 and I know, in the area of transportation fuels, obviously,
- 15 they form the basis of policy like the Low Carbon Fuel Standard
- 16 and others, but I have also seen them applied at the individual
- 17 facility level to substantially improve the operations and
- 18 design of facilities, so I think this looks like it has got
- 19 great potential. Did I understand, you said that this has the
- 20 ability of distinguishing between water sources, different
- 21 geographic specificity?
- MR. O'HAGAN: Yes. Basically we would be developing
- 23 the framework, and the user would put in information the
- 24 different water sources, whether they are importing Colorado
- 25 River water, local groundwater, desalinization, you know,

- 1 brackish desalinization, surface water diversions, and
- 2 put that information in, and you look at stresses associated
- 3 with that, to allow you to better understand the alternatives.
- 4 COMMISSIONER EGGERT: And this includes both
- 5 construction and operation phased assessment? Is that from the
- 6 materials aspect?
- 7 MR. O'HAGAN: Yes.
- 8 COMMISSIONER EGGERT: They said there was a case
- 9 study in the Marin Municipal Water District and Oceanside, do
- 10 you know, did that assessment result in any changes taken by
- 11 them to improve operations or -
- MR. O'HAGAN: For Marin, it assisted them in their
- 13 planning for alternative water supply. They were looking at
- 14 desalinization, also additional groundwater pumping, and so, as
- 15 far as I am aware, they have not implemented anything out of
- 16 that, but they certainly used it as part of their planning
- 17 process, and Oceanside was also very interested, but whether
- 18 they implemented anything coming out of this, I cannot say. We
- 19 did hold two public workshops, one in Northern California and
- 20 one in Southern California on the model, there was a very good
- 21 turnout between actual attendance and people on the Webcast.
- 22 There is a lot of interest in the model, certainly with water
- 23 and waste water treatment districts, having to deal with CEQA
- 24 issues, and for greenhouse gas emissions, there is a lot of
- 25 interest in this model for that regard.

- 1 COMMISSIONER EGGERT: Do you know, is there
- 2 any way for us to capture those sort of success studies,
- 3 particularly when it actually led to changes like allowing for
- 4 them to upload their experience to the Website portal, or
- 5 something of that sort?
- 6 MR. O'HAGAN: You mean actual users' experience with
- 7 –
- 8 COMMISSIONER EGGERT: Correct.
- 9 MR. O'HAGAN: I am not aware, but it is something we
- 10 could certainly ask the researchers to provide.
- 11 COMMISSIONER EGGERT: Okay, and I think in terms of
- 12 sort of furthering the ability to understand the full benefits
- 13 of our research activities, you know, getting some of those
- 14 case studies, with actual benefits articulated, would be real
- 15 useful.
- MR. O'HAGAN: I should say, the existing project will
- 17 have two case studies also, with different districts than the
- 18 one in the initial report; however, these are, if you will,
- 19 modeling studies and not actual success stories.
- 20 COMMISSIONER EGGERT: Okay, thank you.
- MR. O'HAGAN: Thank you.
- 22 COMMISSIONER WEISENMILLER: I think all of us, as we
- 23 are dealing with the siting issues for sustainable energy
- 24 projects really had to confront a nexus between energy and
- 25 water, and the need to have both a sustainable energy system

- 1 and a sustainable water system, so certainly I applaud
- 2 the efforts here to try to keep that context on water and the
- 3 lifecycle perspective. And I think this is an important
- 4 project.
- 5 COMMISSIONER BYRON: Yeah, we did not quite expect
- 6 that nexus to be as pronounced with the renewable projects as
- 7 it is. Mr. O'Hagan, I think you really got something here.
- 8 Clearly, this model has been of interest for a while, it is
- 9 going to gain more interest, I suspect, as you make it more
- 10 accessible as a Web-based tool. I wish I had more time, these
- 11 are the kinds of things that I would like to dive down into, as
- 12 well, and understand better some of the things that this model
- 13 can do for us, an assessment of the impacts of consumption of
- 14 water, as Commissioner Eggert had indicated, and the lifecycle
- 15 analysis. A lot of good information here. I am interested in
- 16 knowing how widespread its use is, I do not know if you have a
- 17 window on that or not, you indicated a couple of workshops have
- 18 taken place, and clearly you have got I think this is the
- 19 second evolution now that you have gone through since initially
- 20 conducting this model. Are there any plans for additional
- 21 workshops or assistance to potential users?
- MR. O'HAGAN: Yes. Once the model is placed on the
- 23 Web, the intent is to have two more workshops, one in Northern
- 24 California, and one in Southern California, and this is not
- 25 being funded by PIER, but it is to explain to people how to use

- 1 the model, once again, on the Web-based tool, explain
- 2 the links to other information, such as generation emissions
- 3 for your local area or district, that sort of thing, so people
- 4 can be comfortable in using the model. But the idea is to make
- 5 it as user-friendly as possible on the Web. But, yes, we are
- 6 discussing two further workshops for this.
- 7 COMMISSIONER BYRON: Good. Like I said, I think you
- 8 have really got something here that is going to be of much more
- 9 value and use going forward, good anticipation on the part of
- 10 the R&D Division to see that there would be a strong need for
- 11 this. Mr. Kelly, we are going to need to make sure we keep
- 12 track of this one, as well, I think there is going to be
- 13 substantial interest in the next 12-24 months on this. I am
- 14 prepared to move approval of the item. That is a motion.
- 15 COMMISSIONER EGGERT: Second.
- 16 CHAIRMAN DOUGLAS: All in favor?
- 17 (Ayes.)
- 18 Item 4 is approved. Thank you, Mr. O'Hagan.
- 19 MR. O'HAGAN: Thank you very much.
- 20 CHAIRMAN DOUGLAS: Item 5. University Of California,
- 21 Los Angeles. Possible approval of Contract 500-10-009 for
- 22 \$550,000 with the Regents of the University of California, Los
- 23 Angeles, to develop a method for estimating the energy and
- 24 environmental impacts of community-scale changes on urban
- 25 transportation systems. Mr. Stokes.

1 MR.	STOKES:	Good morning	, Chairman	Douglas
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- 2 and Commissioners. My name is Erik Stokes, I am part of the
- 3 PIER Transportation Program Area. PIER Transportation is
- 4 seeking Commission approval today for a two-year, \$550,000
- 5 electric funded interagency agreement. This agreement is with
- 6 the Institute of the Environment located at the University of
- 7 California, Los Angeles. In response to Senate Bill 375,
- 8 Regional and Local agencies are now required to develop and
- 9 implement land use plans that will achieve regional and GHG
- 10 reduction targets for automobiles. This research project will
- 11 develop decision support tools to help land use planners
- 12 estimate the energy and GHG impacts from future community
- 13 planning and development decisions. For this project,
- 14 researchers will conduct field measurements in two California
- 15 neighborhoods. The data and methods developed from these field
- 16 measurements will populate an advanced lifecycle assessment
- 17 model for transportation systems. This model will then be used
- 18 to product and analyze scenarios for reducing the energy demand
- 19 and GHG emissions of transportation systems compared to
- 20 business as usual scenarios. These scenarios will also include
- 21 estimates of air quality, waste streams, and material
- 22 consumption. In addition to the scenarios, a protide
- 23 calculator tool will be developed using a scaled down version
- 24 of the model. This user-friendly tool will be built for use by
- 25 planners and developers so that they can analyze future

- 1 community development decisions. As part of this
- 2 research, a Project Advisory Committee will be formed to
- 3 provide input and guidance. The PAC is expected to include
- 4 members from Caltrans, ARB, and SB 375 stakeholder groups such
- 5 as NPOs, local governments, developers, and non-governmental
- 6 organizations.
- 7 CHAIRMAN DOUGLAS: Questions, Commissioners? Or
- 8 comments?
- 9 COMMISSIONER BYRON: No specific comment except that
- 10 it is another good project, I think, out of the I want to
- 11 make sure that I have got it right yes, out of the PIER
- 12 Research Fund, I am prepared to move it.
- 13 COMMISSIONER EGGERT: Well, maybe a comment and a
- 14 question, I guess. As I understand, in preparing this scope of
- 15 work on this project, you did engage with the members of the
- 16 Strategic Growth Council, OPR, ARB, Caltrans, the ones you
- 17 mentioned, to provide input into the design of the program?
- MR. STOKES: Yes, we did.
- 19 COMMISSIONER EGGERT: Okay. Yeah, and this is a
- 20 particularly important area, especially as we are pursuing the
- 21 implementation of SB 375. It is an incredibly challenging and
- 22 complicated analysis, you know, to be able to provide accurate
- 23 quidance to the cities and counties, especially trying to
- 24 understand how different land use patterns will affect things
- 25 like the VMTs, so it is good that it sounds like you have got

- 1 the right set of stakeholders in the Advisory Committee
- 2 and I would definitely encourage you to engage with them, you
- 3 know, wholeheartedly, and I think you will find that they are
- 4 willing to do so. And then, I guess the final thing I would
- 5 say is in terms of as this program progresses, making sure
- 6 that the tools that are developed are readily usable and
- 7 available to the other jurisdictions, in a way that they can
- 8 actually use for planning purposes. And I guess I will second
- 9 that, then.
- 10 CHAIRMAN DOUGLAS: We have a motion and second. All
- 11 in favor?
- 12 (Ayes.)
- 13 This item is approved. Thank you.
- 14 Item 6. University Of California, Irvine. Possible
- 15 approval of Contract 500-10-010 for \$300,000 with the Regents
- 16 of the University of California, Irvine, to develop and
- 17 demonstrate innovative methods and technology for controlling
- 18 the dispatch of combined cooling, heating, and power systems.
- 19 Mr. Aldas.
- 20 MR. ALDAS: Good morning, Commissioners. My name is
- 21 Rizaldo Aldas, and I am with PIER Renewables, as well. In this
- 22 project, the University of California, Irvine, through its
- 23 Advanced Power and Energy Program, will expand its efforts in
- 24 developing and demonstrating the innovative methods in advanced
- 25 control technology for optimal economic and efficient dispatch

- 1 of combined cooling, heating and power systems. This
- 2 project will conduct measurements of CCHP technologies, and it
- 3 will develop values, [inaudible] [26:27] models, which they
- 4 will reference to develop specific sequences, steps, or
- 5 strategies for controlling the performance of CCHP under
- 6 varying loads with electric, heating, or cooling loads, and
- 7 through its industry partner, be able to translate this concept
- 8 into real control hardware and software, which we will bring
- 9 into the field for testing and demonstration in industry-based
- 10 combined heating and power. The project will work with the
- 11 industrial [inaudible] [26:57] and other CCHP technologies in
- 12 light industrial, commercial, and institutional applications.
- 13 This project is funded by the U.S. Department of Energy with
- 14 \$1.282 million of American Recovery and Reinvestment Act (ARRA)
- 15 funds. Although originally this project was proposed by U.C.
- 16 Irvine to a DOE solicitation, that was really in 2008 or prior
- 17 to the implementation of ARRA, then the DOE completed its
- 18 selection, but made a decision to fund this project using
- 19 government funds, and therefore classified this as an ARRA
- 20 project. And that means that the project is not under any of
- 21 those funding opportunity announcements that came out after
- 22 ARRA, and is also not covered by the Energy Commission's cost
- 23 share grant solicitations. And since the project compliments
- 24 PIER's research initiative in making and pushing for CCHP as
- 25 being cost-effective and efficient, and we supported this

- 1 project, we are requesting an interagency agreement in
- 2 the amount of \$300,000 as cost share, and to leverage our
- 3 federal money into California. I request approval of this
- 4 project. Thank you.
- 5 COMMISSIONER EGGERT: I actually got briefed by this
- 6 project and program down at U.C. Irvine by Professor Scott
- 7 Samuelson and his team, and this is the CCHP, which I think he
- 8 characterized as sometimes the forgotten cousin of the CHP that
- 9 gets so much attention in terms of its ability to provide
- 10 distributed in this case cooling energy, in a way that can
- 11 take advantage of waste heat. And I think this project and
- 12 these activities will, I think, help substantially in providing
- 13 guidance in the design of those systems. So, I think it is a
- 14 really exciting project and, of course, a great leveraging of
- 15 our federal partners under the ARRA Program. So, again, I look
- 16 forward to seeing the results of this activity, I think it is a
- 17 good one.
- 18 COMMISSIONER BYRON: I will add my comments to that,
- 19 as well. I mean, a very well put together project. You have
- 20 got a lot of leveraged funds here, and obviously Dr. Samuelson
- 21 has really begun to put Irvine on the map in this area, as
- 22 well. So it is good to see that we are contracting more and
- 23 more with our Southern California schools, I suspect it is
- 24 because energy has become a much bigger issue down south, as
- 25 well as it has always been, it seems, up here in the northern

- 1 schools. So, a very good project.
- MR. ALDAS: Thank you.
- 3 COMMISSIONER WEISENMILLER: I agree. I was certainly
- 4 happy to see more activity on CHP or CCHP, and also that
- 5 basically that Irvine is becoming more of a center for us in
- 6 that area, I think, as we deal with obviously some difficulties
- 7 with the utilities on this, getting the CHP program going
- 8 again. It is good to have this sort of research analytical
- 9 foundation broadened so we can deal with some of their
- 10 concerns. So, again, I am very supportive of this proposal.
- 11 COMMISSIONER BYRON: You gentlemen sound like you
- 12 have heard CCHP for a long time, that is, Combined Cooling,
- 13 Heating, and Power. That was a new one for me.
- 14 COMMISSIONER WEISENMILLER: No, that is good, yeah.
- 15 COMMISSIONER BYRON: Madam Chair, I will move the
- 16 item for approval.
- 17 COMMISSIONER EGGERT: I will second.
- 18 CHAIRMAN DOUGLAS: All in favor?
- 19 (Ayes.)
- That item is approved. Thank you very much.
- MR. ALDAS: Thank you.
- 22 CHAIRMAN DOUGLAS: Item 7. E Source Companies, LLC.
- 23 Possible approval of Contract 500-10-013 for \$499,049 with E
- 24 Source Companies, LLC, to prepare a series of technical briefs
- 25 that describe the results of PIER technologies and disseminate

- 1 them to professional and technical journals, websites,
- 2 and at relevant conferences. Mr. Weightman.
- 3 MR. WEIGHTMAN: Good morning, Commissioners,
- 4 Director, and Attendees. My name is David Weightman. I am a
- 5 Contract Manager with the PIER Buildings Program. The title
- 6 for the proposed agreement seeking your approval is Building
- 7 Technologies Technical Briefs and Market Outreach. The total
- 8 cost of the project is approximately \$500,000 over a three-year
- 9 term, and the work in this agreement will continue efforts from
- 10 a previous contract with E Source that was established in 2004
- 11 and expired in 2008. Increasing awareness of PIER research
- 12 with creation and dissemination of technical briefs, prepared
- 13 as part of this contract, will drive greater implementation of
- 14 advanced energy efficient technologies, help us achieve
- 15 California's aggressive energy savings goals, and the work will
- 16 also further develop and maintain strong market connections for
- 17 PIER sponsored research with the building community, facility
- 18 operators, manufacturers, utilities, and Codes and Standards
- 19 groups. E Source will organize and manage a research team to
- 20 conduct a linked program of market connection projects; among
- 21 them, they include preparing the technical briefs that describe
- 22 the features of PIER technologies, their applications and
- 23 benefits, and the solutions they help solve for achieving
- 24 greater levels of energy efficiency. And I would note that
- 25 some of these technical briefs will be translated into Spanish

- 1 language. E Source will also prepare and publish
- 2 articles about PIER technologies in leading trade journals
- 3 about energy. And, as part of this, they will conduct live
- 4 streaming Web video educational events that feature PIER
- 5 technologies. They will also establish links to the technical
- 6 briefs about PIER technologies at leading trade industry
- 7 Websites, and E Source's Website. And they will distribute
- 8 information about PIER technologies via E Source's extensive e-
- 9 mail database of energy and building design professionals, and
- 10 will also disseminate information about PIER technologies at
- 11 California-based energy-related conferences. This proposal was
- 12 one of the proposals reviewed as part of the Technology
- 13 Innovations in Buildings and Communities 2 RFP released in
- 14 April of 2009, and it was one of 13 proposals that were
- 15 recommended for funding. And it was approved by the R&D
- 16 Committee. So, I am here to answer any questions that you may
- 17 have.
- 18 COMMISSIONER BYRON: Yes, I think a couple of quick
- 19 questions. I am well aware of E Source, I have actually done
- 20 some work with them in the past, and it is an excellent choice.
- 21 I do not believe, or I do not recall that this contract was in
- 22 place before. You indicated that we contracted with them four
- 23 years in the past. Do you have any examples of where the tech
- 24 briefs and/or the workshops have benefitted this Commission,
- 25 Mr. Weightman?

1	MR.	WEIGHTMAN:	Well,	Т	have	not	done

- 2 empirical surveys, per se, but I have some statistics that were
- 3 from the first contract. The first contract was to prepare 25
- 4 technical briefs, they actually prepared 45. And these briefs
- 5 were viewed on the Internet or downloaded over 22,000 times,
- 6 and they distributed 1,350 copies of the technical briefs at
- 7 various conferences around California, and they also prepared
- 8 94 different articles for trade industry publications. And
- 9 during that contract, they established a large e-mail database
- 10 of energy professionals, with over 2,300 names. So, we know
- 11 that we have gotten information out there. We get a lot of
- 12 calls from people even outside California about PIER technology
- 13 and so we feel we are making some success. In this contract,
- 14 they will do what we call "Web Analytics," where they count and
- 15 track who is downloading the information and things like that,
- 16 so we will have better information in this contract.
- 17 COMMISSIONER BYRON: Excellent. I am really glad to
- 18 hear that because, as I read this, I was thinking, whoa, this
- 19 is a great idea, but obviously it is not new, we have done this
- 20 in the past with them, and I hope we continue to benefit from
- 21 this. I feel terrible to say I was not aware that this was
- 22 going on, but I am really glad to see that it is. I think it
- 23 is an important part of our messaging about the good work that
- 24 gets done in the Research and Development Division through the
- 25 PIER funding. So, I am certainly in favor of this project.

1	MR. WEIGHTMAN: Thank you.
2	COMMISSIONER EGGERT: Yeah, just to echo that, this
3	looks tremendous. I think, I mean, definitely our research is
4	only as good as it actually gets used. So, to the extent that
5	this helps get those findings and research conclusions in a
6	usable form for the actual implementers, I think this looks
7	like an excellent project. I guess one question I would have,
8	which is more of a generic one for the R&D Division is, you
9	know, should we be doing more of this in other areas of the
10	PIER program? Is this a model of how to get the information
11	out on a lot of our research programs to the actual community
12	that is doing the work?
13	MR. WEIGHTMAN: Well, I have contacted Chris - I
14	cannot pronounce her last name - she is managing the ARRA Work
15	Force Development Program for the Commission, and we are going
16	to try to make sure that this information funnels to her
17	program and gets out to the educational institutions that are
18	doing work force development, so that PIER technologies can be
19	emphasized in the training for professionals that go out in the
20	field and install. And I also would mention that E Source has
21	indicated a willingness to go beyond buildings if they feel
22	comfortable with it, to do some other technical briefs that
23	might relate to transportation or generation technologies that
24	go outside of buildings. So, they are very flexible in what

they will do. And I think, again, based on the previous

25

- 1 contract, they will probably do more than 40 technical
- 2 briefs that are, at the bare minimum, called for in this
- 3 contract.
- 4 COMMISSIONER EGGERT: Do we brand these briefs? I
- 5 mean, is it clear that this is a product of the PIER Program?
- 6 MR. WEIGHTMAN: Yes, it has our logo and name
- 7 prominently displayed.
- 8 COMMISSIONER EGGERT: Okay, excellent. This looks
- 9 great.
- 10 COMMISSIONER WEISENMILLER: Yeah, I was going to say,
- 11 actually, I think this is a very good project. Back in the
- 12 '80s, I guess it was Art convinced me and ultimately one of the
- 13 founders of E Source, Mike Shepard, to put together a
- 14 publication on financing energy conservation for ACEEE, and I
- 15 can say Mike is very very good at that communication, and I am
- 16 sure that skill has really grown through that organization, so
- 17 I think it is a very good choice to get this type of
- 18 information out. So, again, I would certainly move the item.
- 19 COMMISSONER BYRON: Second.
- 20 CHAIRMAN DOUGLAS: All in favor?
- 21 (Ayes.
- Item 7 is approved. Thank you.
- MR. WEIGHTMAN: Thank you.
- 24 CHAIRMAN DOUGLAS: Item 8. Premium Power
- 25 Corporation. Possible approval of Grant Agreement PIR-10-001,

- 1 awarding \$394,082 to Premium Power Corporation to
- 2 demonstrate the load management and peak-shaving performance of
- 3 a 100-kilowatt/150 kilowatt hour zinc-bromide energy storage
- 4 system. Mr. Gautam.
- 5 MR. GAUTAM: Gautam.
- 6 CHAIRMAN DOUGLAS: Gautam.
- 7 MR. GAUTAM: Good morning, Commissioners. My name is
- 8 Anish Gautam and I am here on behalf of the Energy Research and
- 9 Development Division's Industrial Air Condition Water Group to
- 10 seek approval of this project with Premium Power Corporation.
- 11 This project was a result of a competitive Emerging Technology
- 12 Demonstration Grants Program in which we partnered with the
- 13 utilities and the California Energy Commission, us, to
- 14 demonstrate emerging technologies with measurement and
- 15 verification to be provided by one of the utilities.
- 16 For this project, we were demonstrating Premium
- 17 Power's zinc-bromide flow battery. This is a 100-kilowatt
- 18 power, 150 kilowatt hour capacity battery pack. The
- 19 demonstration site will be a Wal-mart store in San Diego, and
- 20 we will be partnering with San Diego Gas & Electric to provide
- 21 measurement and verification. Currently, lead acid batteries
- 22 dominate the energy storage market, but these batteries are
- 23 typically used for back-up power, uninterruptible power supply
- 24 and, in some cases, for low leveling application on the utility
- 25 side of the meter, the Grid. However, this technology is

- 1 suited for situations where you require short duration
- 2 and infrequent cyclings, so charge/discharge cycles. They
- 3 cannot be deeply discharged and they are not very well for
- 4 frequent charge/discharge cycles, we still need to add work
- 5 effect on the life and performance. There are also disposal
- 6 requirements for lead acid batteries, they have to be disposed
- 7 of in accordance with the state, local, and federal
- 8 regulations. For these reasons, lead acid batteries are not
- 9 suitable for peak shaving, load management, or demand response
- 10 applications, unlike the Premium Power zinc- bromide flow
- 11 battery, which is specifically designed for peak shaving, load
- 12 management, and demand response application.
- 13 This technology is capable of providing 30-year
- 14 service life with appropriate maintenance. It can provide 70
- 15 percent efficiency, so from the Grid to the battery pack to the
- 16 load. It provides unlimited cycling, and it has 100 percent
- 17 depth of discharge, so you can give up all energy stored in the
- 18 battery pack. As far as disposal, unlike the lead acid
- 19 batteries, the zinc-bromide salt complex is environmentally
- 20 benign and can recycle for reuse in the battery packs. The
- 21 modules themselves are developed from high density polyethylene
- 22 plastics, which are similar to no chip plastics, which can also
- 23 be recycled.
- 24 The overall goal for this project is to demonstrate
- 25 this battery pack and its peak shaving, load management

- 1 application at Wal-mart, and have the utilities provide
- 2 the measurement and verification for the important metrics such
- 3 as performance, reliability, safety, and economics, all which
- 4 are absolutely critical for the end-user to become comfortable
- 5 with the technology, and for the utilities to have the
- 6 information they need to eventually go forward and provide
- 7 incentives and rebates.
- 8 The project partners, Wal-mart, San Diego Gas and
- 9 Electric, and Premium Power, will be providing almost \$114,000
- 10 in match funding, the project term is 36-months. We humbly
- 11 request your approval, and if you have any questions, I will be
- 12 happy to answer them.
- 13 COMMISSIONER BYRON: Excellent project. I will keep
- 14 my comments short, and maybe one question. The phrase that
- 15 really got me "connected to the customer side of the meter."
- MR. GAUTAM: Yes.
- 17 COMMISSIONER BYRON: And, of course, I liked this
- 18 very much. This is often ignored that we look at the
- 19 customers' interest in these kinds of projects.
- 20 MR. GAUTAM: This was one of the first ones being
- 21 demonstrated.
- 22 COMMISSIONER BYRON: Excellent. So, technical
- 23 question. Is there much maintenance associated with these
- 24 kinds of batteries? Because obviously customers want something
- 25 that just sits there and does not need a whole lot of

- 1 attention.
- 2 MR. GAUTAM: For this project, Premium Power will
- 3 provide the maintenance, but its expected cost for maintenance
- 4 is going to be about half a cent per kilowatt hour provided, so
- 5 there is maintenance as with any large equipment, but it is not
- 6 going to be as much as lead acid batteries, we have to go out
- 7 and monitor the electrolyte level, you have got to put in water
- 8 and make sure everything is working. But there is maintenance,
- 9 but it is on par with cheaper over the life, the 30-year life,
- 10 as compared to lead acid batteries.
- 11 COMMISSIONER EGGERT: Thank you very much. This does
- 12 look like a very worthwhile program. I noted in the write-up
- 13 an estimate of the cost of \$200 per kilowatt hour?
- MR. GAUTAM: Yeah, I forgot, it reaches on par with
- 15 lead acid batteries, so if this works, Wal-mart has also
- 16 indicated that they might roll it out to other Wal-mart stores
- 17 in the state, considering that there are about 100 Wal-mart
- 18 stores, it is a pretty big deal for us to have Wal-mart as the
- 19 store -
- 20 COMMISSIONER EGGERT: We had a couple of briefings
- 21 yesterday as part of the IEPR Workshop, looking at a number of
- 22 different battery chemistries for energy storage. And this
- 23 cost is definitely very very competitive. Do you know, is this
- 24 the anticipated cost? Or is this actually what we are buying
- 25 them for, for the purposes of this demonstration?

1	MR.	GAUTAM:	This	is	the	anticipated	cost	when
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- 2 we do the roll-out of mass production. The reason it is on par
- 3 is because the plastic reused in the construction of these
- 4 modules, this is 150 kilowatt hours, about 27 towers, the
- 5 plastics are recyclable and also the salt the zinc-bromide
- 6 complex is also fairy inexpensive, so all of it goes on a
- 7 lifecycle assessment price, much cheaper to use this than lead
- 8 acid batteries.
- 9 COMMISSIONER EGGERT: And is this currently in series
- 10 production?
- 11 MR. GAUTAM: This technology has been in production
- 12 since '04, but has mainly been used on the utility side of the
- 13 meter, so this will be the first one where we are going to be
- 14 demonstrating it on the customer side of the meter. And having
- 15 the utilities involved, and having them provide the emerging
- 16 verification tool, they will be getting the information they
- 17 need to go forward and provide the incentives and rebates, this
- 18 is going to be absolutely critical because, as things stand
- 19 right now, there are no incentives for using energy storage
- 20 unless you go with renewable applications on-site, and then you
- 21 can leverage the SCHIP[phonetic] program.
- 22 COMMISSIONER EGGERT: Excellent. All right, thank
- 23 you very much.
- MR. GAUTAM: Thank you.
- 25 COMMISSIONER EGGERT: I will move the item unless

- 1 there are further questions.
- 2 COMMISSIONER WEISENMILLER: I will second it.
- 3 CHAIRMAN DOUGLAS: All in favor?
- 4 (Ayes.)
- 5 That item is approved. Thank you.
- 6 MR. GAUTAM: Thank you.
- 7 CHAIRMAN DOUGLAS: Item 9. Gas Technology Institute.
- 8 Possible approval of Grant Agreement PIR-10-002 awarding
- 9 \$399,973 to Gas Technology Institute to demonstrate medium
- 10 temperature non-tracking solar collectors in an industrial
- 11 setting. Mr. Kazama.
- MR. KAZAMA: Good morning, Chairman Douglas and
- 13 Commissioners. I am Don Kazama of the Energy Research and
- 14 Development Division's PIER Industrial Agricultural and Water
- 15 Team. And we are seeking approval and agreement with the Gas
- 16 Technology Institute, or GTI, they are a world leader in
- 17 combustion and steam R&D. This agreement is for the
- 18 demonstration of a medium temperature solar assisted industrial
- 19 process heating system called the External Compound Parabolic
- 20 Concentrator, or XCPC. This is an industrial energy efficiency
- 21 project and was competitively selected under the Emerging
- 22 Technology Demonstration Grant. There is a three-year project
- 23 term and \$553,000 of matched funding will be coming from GTI's
- 24 two California-based partners. All three California-based
- 25 investor owned utilities assisted PIER Program staff in the

- 1 selection of these projects, and the project was
- 2 previously approved by the RD&D Committee. Commercially
- 3 available, not contracting flat plate and evacuated tubes,
- 4 solar collectors, exhibit their best efficiencies at
- 5 temperatures not exceeding about 180 degrees Fahrenheit. And
- 6 these are well suited to domestic and service water heating
- 7 applications, but not to industrial applications where the
- 8 temperature requirement is between 212 and 400 Fahrenheit.
- 9 Existing solar technology for industrial applications typically
- 10 relies on tracking parabolic trough solar collectors, and it is
- 11 required to put enough heat out while maintaining reasonable
- 12 efficiency levels. But there is a down side. Tracking
- 13 collectors tend to have high installation costs, and are
- 14 maintenance intensive. And, for these reasons, industry has
- 15 not widely adopted solar technology to provide heat for their
- 16 processes. GTI's XCPC technology is non-tracking; no motors
- 17 are needed to drive the collector array, so this results in
- 18 lower equipment first cost, and reduced maintenance needs.
- 19 A previous Pier funded study of the XCPC prototype
- 20 that was conducted by U.C. Merced showed that it can provide
- 21 nearly all the heat provided by a fully tracking collector
- 22 system and XCPC prototype, built by SolFocus under this
- 23 previous PIER funding, has been operating for about six months
- 24 at the NASA/Ames Research Center, and data collected from this
- 25 operation verifies the amount of heat that is being put out.

- 1 Now, this technology can be easily applied to other
- 2 industrial process heating needs, such as absorption chilling,
- 3 heating of boiler feed water, and for industrial process drying
- 4 purposes. This demonstration project is the follow-up to the
- 5 original PIER U.C. Merced prototype study, and would help
- 6 develop the business case for this particular technology. This
- 7 project intends to address the barriers of lack of market
- 8 demonstration and will provide evidence of proposed value of
- 9 solar thermal applications in industrial processes. And this
- 10 demonstration technology is linked with a universally
- 11 recognized name branded industrial partner, Miller Brewing.
- 12 And to connect XCPC to the market, the Southern California Gas
- 13 Company will be providing measurement and verification
- 14 services, and will ultimately provide financial incentives to
- 15 customers, adopting its use through their emerging technology
- 16 energy efficiency incentive program, and to further aid in the
- 17 technology transfer process, it is expected that XCPC
- 18 technology will be featured at various energy forums, including
- 19 the upcoming emerging technology summit that is being co-
- 20 sponsored by the Commission this November. And because of the
- 21 potential benefits to all California industry, we are
- 22 recommending that the agreement with GTI be approved and I
- 23 would be happy to answer any questions you might have.
- 24 COMMISSIONER BYRON: No questions, really, Madam
- 25 Chairman. It is really PIER Day here at the Business Meeting.

1	Т	think	this	is	the	last	$\circ f$	the	PTER	projects	for	review
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- 2 and approval. We certainly need I get asked questions all
- 3 the time, why don't we do more in California with regard to
- 4 solar water heating. So, projects like this are certainly
- 5 needed and, of course, the association with the Miller Brewing
- 6 Company, beer is an important subject to this Commission. We
- 7 were discussing beer, actually, just before the meeting
- 8 started, Mr. Kazama. So, I would like to thank you very much
- 9 for bringing this project to us, no questions, I am prepared to
- 10 move the item.
- 11 CHAIRMAN DOUGLAS: Other questions?
- 12 COMMISSIONER EGGERT: Just a couple of quick
- 13 questions and, yeah, I very much appreciate bringing this
- 14 before us. Coming from the home state of Miller, and one that
- 15 drinks a fairly sizeable amount of it, it is good to know that,
- 16 in the future, we might be able to claim that we are drinking
- 17 solar powered beer with a lower impact to the and, actually,
- 18 similar to Commissioner Byron, I have been getting a number of
- 19 folks that have been asking this question about, you know, what
- 20 are we doing with respect to solar thermal? What projects and
- 21 policies are we using to help move that technology into the
- 22 marketplace? And this is clearly one of those. And I was
- 23 looking some of the numbers here, you know, the levelized
- 24 [sic] cost of energy estimated at two to three cents per
- 25 kilowatt hour, I am assuming that is heat energy, is that

- 1 right?
- 2 MR. KAZAMA: Correct, yes.
- 3 COMMISSIONER EGGERT: And then, there is some
- 4 reference to the potential for this to drive absorption
- 5 chilling, but is that going to be demonstrated in this project?
- 6 Or is it anticipated to be demonstrated?
- 7 MR. KAZAMA: Not in this particular project,
- 8 Commissioner. This is intended to provide displacement of
- 9 natural gas for either a stand-by boiler or for one of their
- 10 duct burners.
- 11 COMMISSIONER EGGERT: Okay. Yeah, I have no further
- 12 questions. I will -
- 13 COMMISSIONER BYRON: I move the item.
- 14 COMMISSIONER WEISENMILLER: I was going to say,
- 15 actually, obviously as we are looking at this is sort of a
- 16 major concentration we have on sustainable resources through
- 17 solar, the question that struck me pretty early on was what
- 18 were we doing in R&D in the solar area and our solar thermal
- 19 area, and I know, early on, I asked Art where the real center
- 20 for California and the University system was for solar thermal,
- 21 or solar research, and he indicated Merced. And I also was
- 22 talking to my Chemistry Research Director, Joe Cerny, and Joe
- 23 had been Dean of Research at Cal, and at some point he took an
- 24 assignment to help get U.C. Merced going, and again, Joe
- 25 assured me that Merced really had, you know, and the U.C.

- 1 system, had a very very strong capability on solar R&D.
- 2 So, certainly I would encourage us to continue building that
- 3 expertise there. And, again, certainly all the academic
- 4 researches I have done, this has done a very good connection to
- 5 Merced and it would be very good if we could deepen that
- 6 research capability there. So, I certainly would second this.
- 7 CHAIRMAN DOUGLAS: All in favor?
- 8 (Ayes.)
- 9 That item is approved. Thank you, Mr. Kazama.
- MR. KAZAMA: Thank you.
- 11 CHAIRMAN DOUGLAS: Now, as we begin to take up Item
- 12 11, there is clearly some significant public interest in Item
- 13 11 and I would like to ask that anybody who is here from the
- 14 public, who would like to make a comment, if you have not yet
- 15 filled out a blue card with the Public Advisor, please do so,
- 16 so I can get your name in the stack. We will take up the
- 17 commenters on the phone after we get through with the people in
- 18 the room. So far, I have got two people on the phone who have
- 19 indicated they would like to speak.
- 20 So, Item 11. Consolidated Hearing on Issues
- 21 Concerning U.S. Bureau of Land Management Cultural Resources
- 22 Data (10-CRD-1). Possible adoption of Proposed Decision of the
- 23 Siting Committee on issues concerning U.S. Bureau of Land
- 24 Management (BLM) cultural resources data. Mr. Kramer.
- MR. KRAMER: Good morning. The proposed decision

- 1 comes to you from the Siting Committee, which held a
- 2 hearing on this item on June 9<sup>th</sup>. Basically, and in short
- 3 summary, the proposed Decision agrees with the BLM that the
- 4 federal agencies have the ultimate control over the cultural
- 5 resources data that is an issue in these cases, and that it is
- 6 now within the power of this agency to give that data to
- 7 parties if the federal agencies object. So, in the one case
- 8 where that data was released, and that was to CURE in the
- 9 Imperial Valley case, the Order directs CURE to return that
- 10 information, that data, to us for return to BLM. The Order
- 11 also concludes that CURE, like all other interveners, has no
- 12 legal right to the most detailed data on the location of
- 13 cultural resources. They are in a different position than
- 14 Commission staff, which has, if you will, a higher need for
- 15 that data in order to conduct its work. And while the
- 16 Commission would like to see that all the parties in these
- 17 cases can have all the relevant data that is available to them,
- 18 it simply is not within our power to overrule the BLM or the
- 19 other federal agencies if they believe that the data should not
- 20 be shared. But we are encouraging those federal agencies to
- 21 help us out by making the data available whenever they can find
- 22 it within their power to do so.
- 23 And then, finally, the Order provides direction on
- 24 how requests for confidential data should be handled in our
- 25 Power Plant certification proceedings. It is a precedential

- 1 Decision, it is labeled as such, and the Public Advisor
- 2 expressed a concern to me that there is part of a paragraph
- 3 near the end of the Decision, what will be page 10 of the Final
- 4 Decision, that suggested under different circumstances, that
- 5 is, if we were not facing the ARRA-based deadlines, the
- 6 Commission might consider delaying the processing of a siting
- 7 case to allow parties time to go through the BLM or other
- 8 Federal Agency process in order to obtain the data. The Public
- 9 Advisor was concerned that, because this is a precedential
- 10 decision, somehow we were signaling that, in other cases in the
- 11 future, we would adopt the same approach and not consider the
- 12 possibility of delaying the processing of a case, and I just
- 13 wanted to make it clear that my interpretation of this Order is
- 14 not that, but that it leaves open that question in future cases
- 15 where ARRA deadlines are not a factor, but the cases that are
- 16 currently before the Commission where this Decision would give
- 17 direction to, for instance, the Chief Counsel's Office in
- 18 processing some other requests that have been made after the
- 19 Imperial Valley request, the ARRA deadlines are an issue and I
- 20 presume that the same answer would be that there would not be a
- 21 willingness to delay the proceedings to allow for the BLM
- 22 processes to decide whether or not the data could be made
- 23 available to the parties. So, with that, the Committee
- 24 recommends that the Commission adopt the proposed Decision
- 25 after listening to the comments today.

m l CHAIRMAN DOUGLAS: Thank you, Mr. Kramer. A	ank vou, Mr. Kramer. And
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- 2 I will add, I did not know that that last question had arisen,
- 3 but I would like to clarify that it is also the Siting
- 4 Committee's intention that this Order would apply to -- that
- 5 balancing has been done for the cases that are enumerated or
- 6 written out in this Order, but that the Order absolutely leaves
- 7 open the process in other cases for respective Siting
- 8 Committees to make the determination about whether to hold
- 9 things up in the future if there is relevant information that,
- 10 in that committee's judgment, is obtainable and we should slow
- 11 down for. In the cases that were consolidated into this
- 12 Decision, the Siting Committee or this proposed Order the
- 13 Siting Committee has done that balancing.
- 14 COMMISSIONER WEISENMILLER: Obviously, we are dealing
- 15 with complicated balancing issues here that, you know,
- 16 obviously our agency was established by the Warren-Alquist Act
- 17 and certainly we reflect the values of that, and the Warren-
- 18 Alquist Act has always had a tension, obviously, between Al
- 19 Alquist, who wanted a one-stop, expedited siting agency, and
- 20 Charlie Warren, who was really determined to have a public
- 21 process presiding, and also to make sure the environmental
- 22 values and mitigation was fully incorporated in that. I would
- 23 note that probably the last major siting case prior to the
- 24 Energy Commission was the Helms Project at the PUC, where there
- 25 was no public hearing at all, none. So, certainly our

- 1 balancing is tested to try to have a very public
- 2 process. I think, here we have the ARRA deadlines really drive
- 3 things and we really need to work closely with BLM to have a
- 4 shot at pulling it off, so I think here, you know, certainly I
- 5 would say with any decision, we would like to limit the sort of
- 6 range of what we are dealing with to the facts we have now, but
- 7 certainly provide guidance for future committees in terms of
- 8 trying to strike the balance between, you know, the Alquist
- 9 part of it, and the Charlie Warren part. I would footnote
- 10 that, obviously, my first exposure to the Commission was in Ron
- 11 Doctor's office, and Ron was Charlie's appointment to the
- 12 Energy Commission, so I probably tilt more in that direction.
- 13 But, again, somehow we have to do the balancing test and, you
- 14 know, in future cases I am sure we will have similar tough
- 15 choices on balancing the need to process the case, but to make
- 16 sure we do it in a very public process, with full consideration
- 17 of mitigation.
- 18 CHAIRMAN DOUGLAS: We will move to public comment
- 19 now. And I am sure there will be some significant discussion
- 20 once we get through public comment. I would like to begin with
- 21 California Unions for Reliable Energy, Rachel Koss.
- MS. KOSS: Good morning, Commission. Very briefly,
- 23 CURE would just like to thank the Commission for its very
- 24 careful consideration of this important issue. We understand
- 25 that the Commission has been put in a very difficult position.

- 1 We see no fault, as we have stated in our written
- 2 comments, with the Committee's legal analysis, however, we are
- 3 still concerned, in the spirit of Mr. Warren -- as Commissioner
- 4 Weisenmiller so eloquently pointed to -- it is unfortunate that
- 5 this will be preventing parties full participation in Energy
- 6 Commission proceedings. Finally, we would just like to thank
- 7 the Commission for encouraging BLM to work with CURE and other
- 8 parties in obtaining the information and accommodating our
- 9 requests. Thank you.
- 10 CHAIRMAN DOUGLAS: Thank you. The next speaker we
- 11 have is Sandy Carey with Galati & Blek. Ah, Mr. Galati.
- MR. GALATI: We are in a workshop Rachel and I are
- 13 in a workshop, so Scott Galati representing Genesis and the
- 14 Solar Millenium, Blythe and Palen project, we are in a workshop
- 15 and there was an opportunity for us to take a break, so thank
- 16 you for accommodating us to step in. We support the decision,
- 17 we also would like to acknowledge that the Committee, I think,
- 18 did an appropriate balancing test. The way I read the
- 19 precedential portion is that the legal analysis that the
- 20 Committee went through was precedential, but the facts of any
- 21 particular case using that same legal analysis, if the
- 22 Committee imagined it a motion to a presiding member, that this
- 23 particular schedule should be delayed for reasons for
- 24 cultural resource information, I imagine that would be heard.
- 25 We would probably go through the same legal analysis, but there

- 1 is a factual question at some point in time whether or
- 2 not the information is necessary to participate, and I imagine
- 3 we could have that debate at that time. Is that the intent of
- 4 the committee?
- 5 CHAIRMAN DOUGLAS: Yes, that is right. It is
- 6 certainly not to make fact situations precedential, but the
- 7 Siting Committee believes that the legal analysis and also the
- 8 process that we outlined is what we would like to see carried
- 9 forward.
- 10 MR. GALATI: That is how I read your side. I
- 11 appreciate it and just wanted to say that, on behalf of those
- 12 clients, we support the order.
- 13 CHAIRMAN DOUGLAS: Thank you, Mr. Galati. The last
- 14 blue card I have, and unless the Public Advisor stands up, I
- 15 will turn to the phone after I take this person, is David
- 16 Singleton with the Native American Heritage Commission.
- 17 MR. SINGLETON: Thank you to the Chair and is this
- 18 okay to speak from this podium?
- 19 CHAIRMAN DOUGLAS: Please do.
- 20 MR. SINGLETON: And members of the Commission, thank
- 21 you for hearing me on this important issue in support, really,
- 22 of the confidentiality of Native American sacred sites and
- 23 cultural resources. We understand the federal law and
- 24 restrictions that governs the Bureau of Land Management, and on
- 25 this issue we do support their opposition. The Native American

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- 2 agency for the protection and preservation of Native American
- 3 cultural resources. The Public Resources Code acknowledges
- 4 that cultural resources and Native American burials can be
- 5 found anywhere in California, on federal and on state land, it
- 6 does not make any distinction. In fact, on the projects listed
- 7 here, and as you will note from my written comments, there have
- 8 been human remains found on at least one of the projects that
- 9 were considered Native American by the local County Coroner.
- 10 Under California Government Code 27460, all unidentified
- 11 remains are under the jurisdiction of County Coroners or
- 12 Medical Examiners, even if they may be found or discovered on
- 13 federal property.
- 14 The Native American Heritage Commission maintains an
- 15 inventory of sacred sites, and that is codified in the Public
- 16 Resources Code 5097.96 and also 5097.94. And that inventory is
- 17 confidential to the public, it is exempt from the California
- 18 Public Records Act under California Government Code 6254.10.
- 19 And the reason for that is that Native Americans feel very
- 20 strongly about their burial sites and their sacred sites. You
- 21 know, it is a religious belief, strongly held, and they are
- 22 very concerned about the possibility of vandalism, theft, and
- 23 violation of those sites.
- 24 The sites that are identified in the Native American
- 25 Heritage Commission inventory may also be, coincidentally, a

- 1 part of the archeological records of the Bureau of Land
- 2 Management and of those held by the California Office of
- 3 Historic Preservation, and that is not particularly relevant to
- 4 us, it is important, but those that are in our system are
- 5 exempt from the public record and are considered confidential.
- 6 Now, we support the public process and public review of these
- 7 projects, in fact, our office reviews NEPA and CEQA, and
- 8 documents that come from the State Clearing House, and we also
- 9 do sacred lands records searches from Applicants for these
- 10 renewable energy programs, their contractors, archeology firms,
- 11 and environmental firms. The public process that we support is
- 12 we indicate whether or not, you know, back to those applicants
- 13 and to their vendors, contractors, whether or not there are any
- 14 sacred sites, you know, in the USGS coordinates that they
- 15 provide us. And there may not be in our system, but we also
- 16 state in the letter that the absence of such does not mean that
- 17 they do not exist at the subsurface level. And we also attach
- 18 a list of Native American contacts that are culturally
- 19 affiliated to that physical location and that is where the
- 20 public review process, you know, is found, at least in our
- 21 system. We encourage and urge the applicants, the lead
- 22 agencies, to consult with those tribes. You know, a similar
- 23 requirement under federal law is also the responsibility of the
- 24 Bureau of Land Management and other federal agencies, but we
- 25 urge that the applicants and lead agencies consult with those

- 1 tribes to determine what impact, if any, the proposed
- 2 project would have on cultural resources and on Native American
- 3 burials, if those are present there. And as part of that
- 4 process, a mitigation plan may be developed. The Public
- 5 Resources Code provides for our commission to assist in the
- 6 development of that plan/agreement between local tribes. There
- 7 can be a pre-excavation agreement that would handle or identify
- 8 all the steps that would be involved in avoiding or mitigating
- 9 an impact on a sacred site. So, I will be happy to answer any
- 10 questions, but we oppose or we support the Bureau of Land
- 11 Management on this issue, but from the standpoint of the State
- 12 of California law. Thank you.
- 13 CHAIRMAN DOUGLAS: Well, thank you very much for
- 14 being here, Mr. Singleton. I do not know that there are
- 15 questions now, but there may be later if you would not mind
- 16 being here throughout our discussion. It is helpful to all of
- 17 us to hear from you.
- 18 MR. SINGLETON: Okay, thank you very much. I will be
- 19 here.
- 20 CHAIRMAN DOUGLAS: Thank you. All right, we will
- 21 turn now to the speakers on the telephone, beginning with
- 22 Michael Boyd of CARE.
- MR. BOYD: ...Californians for Renewable Energy.
- 24 First, I would like to object to the fact that the Commission
- 25 did not provide me proper 10-day written notice of this

- 1 meeting, this item being on their agenda. My
- 2 understanding is, under the Bagley-Keene Act, if you request
- 3 notice, that the Commission is required to give me that 10-day
- 4 notice. I got a seven-day notice by e-mail, and so this is the
- 5 second incident where it appears the Commission thinks it is
- 6 okay to violate this act, the first incident being your so-
- 7 called Emergency Item to block Bob Sarvey's intervention in the
- 8 Marsh Landing Project, was the first violation that I saw. And
- 9 when we get to the third violation, if you do it again, if you
- 10 do not give me proper notice, I am going to take the matter to
- 11 court and I am going to take it to federal court. I am really
- 12 trying to be reasonable about this, but [inaudible] [1:11].
- 13 Now, regarding the proposed Order, the proposed Order is
- 14 fatally flawed and it has a lot of unnecessary and irrelevant
- 15 portions to it, that essentially appear to be set up to block
- 16 interveners and the public from their rights to participate
- 17 meaningfully in the siting process for these desert renewables.
- 18 And it also appears that you are putting ARRA funding before
- 19 the public's right to participate in the siting process, which
- 20 is a commercial concern of the Applicant. It has nothing to do
- 21 with the adequacy of environmental analysis being conducted
- 22 under CEQA and NEPA on all these projects. So, essentially,
- 23 you are rushing to judgment is what it appears to me is going
- 24 on here. I do agree, as far as with your Proposed Order, on
- 25 page 3 of the Proposed Order, number one says "agrees with BLM

- 1 that the federal agency has ultimate control over the
- 2 data, therefore, the Commission orders CURE to return the
- 3 Imperial Valley data to BLM." I agree with that, but I think
- 4 it would be better that, instead of you saying you are ordering
- 5 CURE to do this, that you request CURE to do this, because I do
- 6 not believe that you have any statutory authority to order CURE
- 7 to do this. And I think that, once you make this information
- 8 public, which you have done, it is going to be difficult to put
- 9 it back in, and I think you need CURE to like give assurances
- 10 that they have not disclosed information to anyone else, and I
- 11 also think that it is important to note that CURE is not giving
- 12 the data back to the CEC staff, it is giving it back to the
- 13 BLM, that is what the BLM requested. And then, for two and
- 14 four, I do not think those are necessary or relevant, I think
- 15 one takes care of that. Now, on page 11 of your Proposed
- 16 Order, you have numbers one through eight, again, number one,
- 17 BLM controls the dissemination of potential data on cultural
- 18 resources that maybe located on land within its jurisdiction,
- 19 we will not disclose records that are a) in our possession or
- 20 control, b) concerns cultural resources on BLM land, and c) are
- 21 confidential under ARPA or NHBA, without permission from BLM.
- 22 I think that is fine. Two, three, four, five, six and seven,
- 23 and eight, well, eight I think that should stay, but the other
- 24 stuff is not really relevant and I do not see what the purpose
- 25 is of putting that language in there, other than to limit CURE

- 1 or limit the public access to relevant information they
- 2 need to participate in the environmental review process for
- 3 these projects. So, essentially, that is my concerns and I
- 4 certainly hope you do the right thing. I think if you leave
- 5 the other language that I told you should be excluded in there,
- 6 that this Order frankly will be subject to litigation, too, and
- 7 that is my statement. Thank you.
- 8 CHAIRMAN DOUGLAS: Thank you, Mr. Boyd. Before we go
- 9 on to the next speaker, I would like to ask our Chief Counsel
- 10 to respond to the issue about notice.
- MR. LEVY: Certainly, Chairman. What the commenter
- 12 is objecting to is the fact that the Order itself was not
- 13 circulated 10 days before the date of the hearing, but Bagley-
- 14 Keene does not require that all materials that may be
- 15 considered be available at the time that the agenda is noticed.
- 16 Bagley-Keene requires 10 days notice of the meeting itself, and
- 17 like all other Business Meetings, this was timely noticed for
- 18 today.
- 19 CHAIRMAN DOUGLAS: And this item was timely noticed
- 20 as on the Business Meeting for today, correct?
- 21 MR. LEVY: This item was timely noticed for the July
- 22 14<sup>th</sup> meeting, I believe it was on July 4<sup>th</sup>. It was timely
- 23 noticed within 10 days, as required by Bagley-Keene. There is
- 24 no infirmity under Bagley-Keene in the manner in which this
- 25 meeting is proceeding.

- 1 CHAIRMAN DOUGLAS: Thank you, Mr. Levy.
- 2 MR. BOYD: I did not get written notice of the
- 3 agenda, and you are required to give written notice if I
- 4 request it, and I got a notice on seven days before this
- 5 meeting, and I got it electronically, okay? And I did not get
- 6 anything mailed to me is what I am saying, you need to mail me
- 7 a notice if I have an item on your agenda where I am a party,
- 8 in that proceeding, and you put it on your agenda, you need to
- 9 give me 10 days written notice or you are violating the Bagley-
- 10 Keene Open Meeting Act.
- 11 CHAIRMAN DOUGLAS: At this point, I would just like
- 12 to ask staff to make sure that Mr. Boyd is on our agenda list
- 13 so that he gets I do not know if he gets our agenda notices
- 14 automatically or not, but let's make sure that he does for the
- 15 actual Business Meetings.
- MR. BOYD: Thank you.
- 17 CHAIRMAN DOUGLAS: And beyond that, let's see here,
- 18 all right, we will go on to the next speaker, Ella Gannon.
- MS. GANNON: Yes, this is Ella Gannon. I am counsel
- 20 to Tessera Solar, North America, the Applicant in the Imperial
- 21 Valley Solar Project and Calico Solar Valley Project, and we
- 22 would like to commend the Siting Committee's careful
- 23 consideration of these issues and we fully support this Order,
- 24 and we thank you for the opportunity to participate in these
- 25 proceedings.

l	Thank you.	Unless	anybody
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- 2 raises their hand now, I think we have gotten through the
- 3 public comment on this item. Commissioners, do you have
- 4 questions? Is there anything you would like Mr. Kramer to
- 5 address?
- 6 COMMISSIONER BYRON: Thank you, Madam Chair. First
- 7 of all, I would like to thank all the participants and
- 8 particularly for being here today and providing their comments
- 9 and input. Clearly, the Siting Committee had a very
- 10 challenging issue here to deal with, with regard to balancing
- 11 state and federal interests, and I think you have done a very
- 12 good job. I found compelling the argument that [quote] "these
- 13 projects also provide options for California's Electric
- 14 Utilities in meeting their statutory obligation per the
- 15 Renewable Portfolio Standard, and they have the potential to
- 16 help to reduce greenhouse gas emissions" to be very compelling,
- 17 and a good argument. However, just earlier in that paragraph,
- 18 I have a question with regard to the I will just read it -
- 19 "Under different circumstances, we might consider delaying a
- 20 siting case to afford an Intervener access to relevant
- 21 information. We do not have that luxury in this instance.
- 22 Each of the above-captioned projects must meet extraordinarily
- 23 tight timelines with respect to state and federal agency
- 24 permitting decisions to qualify for funding from the U.S.
- 25 Department of Energy under the American Recovery and

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- 2 relevant, why is this a compelling reason to not consider
- 3 delay, as was suggested earlier in the paragraph?
- 4 CHAIRMAN DOUGLAS: Let me take a shot at that
- 5 question, Commissioner, and other Commissioners may like to
- 6 address it, as well. I do not think meeting the ARRA deadlines
- 7 is a matter of narrow commercial interest. The State of
- 8 California has made a tremendous commitment, both to renewable
- 9 energy and to AB 32, and meeting aggressive greenhouse gas
- 10 reduction goals. That is a state commitment. And, at the same
- 11 time, the state has a compelling interest in trying to meet
- 12 these targets as economically as possible, and to meet these
- 13 aggressive environmental goals at a cost that is acceptable to
- 14 ratepayers, to minimize the cost to ratepayers when we can, and
- 15 of course, to do this in an environmentally sound way, and in
- 16 accordance with our siting process and our environmental laws.
- 17 So, every time an issue like this comes up, committees, when
- 18 they handle cases, do have to balance the need to push forward,
- 19 let's say, and have an evidentiary hearing at the time at which
- 20 the Committee thinks it needs to hold that hearing, in order to
- 21 meet its schedule to, say, comply with the 12-month deadline in
- 22 statute for us to put cases out, or at least to move cases
- 23 along as quickly as we reasonably can under the circumstances.
- 24 And at the same time, if you believe, as a member of the
- 25 committee that you really strongly feel that the evidentiary

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- 2 when scheduled, and that information would become available if
- 3 you waited three weeks, because a certain process was going on
- 4 that would allow it to come into the process, for example, that
- 5 could be a very strong argument for saying, "Okay, let's delay
- 6 the case three weeks." And that puts us behind we miss our
- 7 12-month statutory deadline, but the world will go on, and we
- 8 will have the benefit of better information. We were not
- 9 convinced, we did not know and we did not get a good sense out
- 10 of the evidentiary hearing of when this information would
- 11 become available, in what format it would become available. We
- 12 believe that our staff can gain access to this information. We
- 13 felt that the more quickly we were able to move forward with
- 14 the decision, the more likely it would be that our staff would
- 15 get access to the information that they needed as quickly as
- 16 they needed it, and they are the party with the obligation
- 17 under the Warren-Alquist Act to conduct this analysis. We
- 18 encouraged BLM to move forward as expeditiously as possible to
- 19 get information to CURE, confidentially, in a way that met
- 20 their needs. And I personally believe that, to the degree that
- 21 they are able to do that, that will inform our decisions, and
- 22 we have the ability as committees when we hear these cases come
- 23 before us, we have the ability to hold proceedings essentially
- 24 In camera, to deal with confidential information that comes
- 25 before us if and when it comes before us, so we can be prepared

- 1 to do so. I think we also believe that our cases will
- 2 be on solid ground, that the analysis that is done will
- 3 certainly meet the standards in the Warren-Alquist Act. If
- 4 some or all of that information is not forthcoming, we need to
- 5 move forward with staff's best analysis, BLM's strongly felt,
- 6 no doubt, input, and our decision-making process. And
- 7 Commissioner Weisenmiller may want to say something here.
- 8 COMMISSIONER WEISENMILLER: I was going to say,
- 9 again, I think and certainly as we look at these projects, one
- 10 of the things that really motivates me is, as we are looking at
- 11 trying to find mitigation land, that one of the things that we
- 12 have to consider in the mitigation land is the greenhouse gas
- 13 impacts, you know, the climate change is affecting things, and
- 14 so, to the extent this is part of our solution to that, and its
- 15 viability of these solutions, I think, is certainly helped if
- 16 we can get the federal grants, if we can get the federal loan
- 17 guarantees, so this is one where, again, in our balancing
- 18 between Al Alquist and Charlie Warren, I was just really
- 19 concerned that if basically we voted this out, that said we
- 20 would wait for BLM and CURE to negotiate something, I do not
- 21 know when those negotiations would be done. And I guess the
- 22 good news is that certainly CURE has I was going to say a
- 23 second bite at the apple in the sense that the cultural
- 24 resource issues, we will do our best job, but BLM is also
- 25 having a parallel process with different things, which is also

- 1 looking at mitigating and protecting the cultural
- 2 resources, which certainly CURE, all the parties, can
- 3 participate in.
- 4 COMMISSIONER EGGERT: I just wanted to say, I think
- 5 this is an extremely challenging balancing act and I also
- 6 appreciate the work that the Committee in preparing this Order
- 7 and something that you said, Chairman, I think gives me some
- 8 increased comfort, in that this does not in any way sort of
- 9 bind the hands of the committees to consider all of the aspects
- 10 of timeliness and access, and individual cases going forward,
- 11 and so I think, given that flexibility that remains within the
- 12 committees, you know, I think you have done a reasonable job of
- 13 balancing all the considerations that were before you. So I
- 14 think that is my main comment.
- 15 COMMISSIONER BYRON: I think the committee has done
- 16 an exceptional job of balancing these issues, Commissioner,
- 17 however, I note in the past that we have never concerned
- 18 ourselves with financial timelines in our decision-making, nor
- 19 the public process, and shortening that. I accept the
- 20 arguments that are made in this Decision, particularly the one
- 21 I indicated with regard to the need to move forward to meet
- 22 RPS; however, I do take exception to this particular argument.
- 23 I will vote for this Decision, but I do not believe that is a
- 24 compelling reason for us to move forward quickly on this
- 25 project.

1	CHAIRMAN DOUGLAS: I appreciate that, and
2	appreciate your support on the Decision. I will just say also
3	that one reason why the ARRA timelines are, I think, in my mind
4	clearly and defensibly something we can point to as a matter of
5	the public interest, as opposed to the individual commercial
6	interests of parties, is the clear interest we have gotten from
7	two branches of government, both the Governor's Office and the
8	Legislature, in the Commission moving forward to meet these
9	timelines. We saw that in the Padilla Bill, which was passed
10	by the Legislature and signed by the Governor, as well as
11	various Executive Orders, and as well as the - I know, by this
12	Commission, and certainly by me, strongly felt, and sometimes
13	too strongly delivered interest, on the part of the Legislature
14	and us moving forward with the programs we administer and thus
15	maximizing the benefit to California from the competitive money
16	available in ARRA, and maximizing, again, consistent with our
17	environmental laws, and consistent with the integrity of our
18	process, the benefits to the state of this opportunity, which
19	is an opportunity to take a very significant step forward in
20	achieving our renewable energy and greenhouse gas goals with
21	significant funding or assistance by the federal government,
22	provided these are projects that can withstand our process.
23	And we are in the thick of that now.
24	COMMISSIONER WEISENMILLER: I guess my last comment
25	is to note my impression is many of these kinds of projects in $61$

- 1 their PPAs have two different prices, one, if they get
- 2 the ARRA money, and a higher one if they do not. So I would
- 3 say this is not simply the commercial interest, but the
- 4 [inaudible] [1:28:23] interest, and certainly interest to all
- 5 Californians to have lower rates while achieving our RPS goals.
- 6 But, again, certainly I think we do have to balance the Al
- 7 Alquist expedited siting part of our DNA with the need to do
- 8 this at a very public and environmentally conscious process.
- 9 CHAIRMAN DOUGLAS: Agreed. I guess the last point on
- 10 the importance of cost, the Energy Commission, in our siting,
- 11 we really need to look at we need to have an assessment of
- 12 impacts, and we need to put forward mitigation that is
- 13 commensurate with those impacts. The mitigation costs money;
- 14 if, at the end of the day what we put out is or appears too
- 15 expensive to the Applicants based on their running of the
- 16 numbers, and that threatens projects, that would be really
- 17 unfortunate, but it is what we are required to do under state
- 18 law and what the Energy Commission has always done. And I do
- 19 think that the availability of this federal money is a
- 20 tremendous opportunity for us to get good projects sited in
- 21 California and projects that basically meet the state's comfort
- 22 level, both in terms of cost and in terms of environmental
- 23 impact.
- MR. LEVY: Chairman, excuse me. May I make a further
- 25 clarification on the Notice?

- 1 CHAIRMAN DOUGLAS: Please.
- MR. LEVY: I am advised, Commissioners, that the
- 3 Business Meeting Agenda was sent out by mail on July 2<sup>nd</sup>, Of
- 4 course, we cannot control when it is received by somebody, we
- 5 are required to send it out 10 days ahead of time, and the e-
- 6 mail blast to everybody on the Listservs went out, also, on
- 7 July 2<sup>nd</sup>, so whenever Mr. Boyd actually received it, we cannot
- 8 control, but we did mail it out timely.
- 9 CHAIRMAN DOUGLAS: All right, Mr. Levy, let's make
- 10 sure that, if Mr. Boyd does not object, we put him on our e-
- 11 mail Listserv, as well, if he is not already on it, so that he
- 12 gets e-mails, as well.
- MR. LEVY: Very well.
- 14 COMMISSIONER WEISENMILLER: I would like to move this
- 15 item.
- 16 COMMISSIONER EGGERT: Second.
- 17 CHAIRMAN DOUGLAS: All in favor?
- 18 (Ayes.)
- 19 Item 11 is approved. Thank you.
- 20 Item 12. Minutes: Approval of the June 30, 2010,
- 21 Business Meeting Minutes.
- 22 COMMISSIONER EGGERT: I move the item.
- 23 COMMISSIONER WEISENMILLER: I abstain.
- 24 COMMISSIONER BYRON: Second.
- 25 CHAIRMAN DOUGLAS: All in favor?

1	(Ayes.)
2	Item 12 is approved with Commissioner Weisenmiller
3	abstaining.
4	Item 13. Are there any Committee presentations or
5	Discussion?
6	COMMISSIONER WEISENMILLER: I am going to try to give
7	hopefully a five-minute presentation. Just before I left in
8	June, I went to the Chadbourne & Parke $21^{\rm st}$ Annual Meeting, and
9	Chadbourne & Parke is a major law firm located in New York,
10	with offices scattered around the globe, and they are a major
11	project finance law firm, and so this conference had about 200
12	participants, most the leading project finance banks and many
13	project developers were there. So it was a very good
14	opportunity, and it was interesting in terms of topics and,
15	again, just to sort of provide some of the feedback from that,
16	one of the topics they discussed was the status of the
17	financial markets, and obviously there was a phenomenal
18	meltdown in the financial markets, and the good news is that
19	they are coming back, although slowly. And, again, we are sort
20	of dealings with ups and downs on stuff, but hopefully we are
21	getting back to the point where there is a vibrant project
22	finance market that can allow these things to go forward. They
23	also reviewed the problems with the Federal ARRA project and I
24	guess the best way to summarize the loan guarantees was that,
25	when Congress passed that program, they expected a tidal wave $$64$$

- 1 of applications hundreds, hundreds, and that those
- 2 would get those grants. Ultimately, there was a drizzle, you
- 3 know, of less than 10, characterized this as DOE's programs
- 4 have had the King Kanute effect of sending that tidal wave back
- 5 out to sea. And that has been particularly unfortunate. In
- 6 terms of the taxable grants, again, a lot of back and forth on
- 7 the details of implementation. Originally, well, the most
- 8 recent federal guidance has really emphasized the need that, if
- 9 you do the construction, that you have to be continuously doing
- 10 construction. So, at this point, the recommendations to folks
- 11 is, indeed, to use the 5 percent safe harbor, which has its own
- 12 set of issues, but that trying to make progress on this,
- 13 between what the developers need and what the Treasury is
- 14 prepared to do, is very difficult and I would say it is
- 15 something that you have to anticipate, at least every other
- 16 month, if not monthly, more stuff coming out that may shift the
- 17 balance between what our Applicants are planning to do. There
- 18 was a very very interesting discussion on storage technologies,
- 19 and I would just you know, we talk here a lot about the R&D,
- 20 so it was very fascinating to see CEOs of six storage companies
- 21 talking about their Business Plans and what their vision was,
- 22 and seeing a lot of interest in the financial community and
- 23 investments in that. And I think, again, looking at we look
- 24 at it a lot for storage integration of renewables -- it was
- 25 interesting to see people also looking at storage for basically

- 1 dealing with shifting base load power, to deal with the
- 2 needs of the system. And also, the roles of storage dealing
- 3 with some power I was going to say "power quality issues,"
- 4 but things like if you are running the New York Subway System,
- 5 how do you deal with the various surges, and what you need in
- 6 putting batteries there. And it seemed like the financial
- 7 community was thinking that this is something which is more
- 8 like six years out, you know, major major growth opportunity.
- 9 So, I mean, again, we tend to look at more R&D, so it was
- 10 heartening to see banks really looking at what were the
- 11 investment opportunities here, and what was the long term
- 12 market, and what were some of the trade-offs in the
- 13 technologies.
- 14 I think, in terms of there was a lot of discussion
- 15 about the Chinese. The message is that Chinese companies, and
- 16 those are really global companies that have Chinese equity in
- 17 those, but that they have arrived, I mean, they are having a
- 18 major role in the energy business, and that fundamentally, as
- 19 we all know, the Chinese have an awful lot of Treasury Bonds
- 20 from the U.S., given the basic flows, and what they are trying
- 21 to do is diversify their holdings by not just holding Treasury
- 22 Bonds, but basically investing in infrastructure in the U.S.,
- 23 and so, again, a basic message is, you know, these are very
- 24 large companies, they are very multi-national companies, they
- 25 have a lot of money, and they are really determined to be very

- 1 serious players in the renewable space in the United
- 2 States, and globally. I mean, obviously, the last interesting
- 3 sessions were really by the various developers, and it is very
- 4 clear, it is a global market, you know, that if you are a wind
- 5 company, if you are a solar company, you can put those
- 6 facilities in California, you can put them in Spain, you can
- 7 put them wherever you have limited capabilities and you are
- 8 basically going to put them where the market is the most
- 9 attractive at a given time. And also, there is a lot of change
- 10 in that industry. A lot of the wind companies, where wind is a
- 11 very mature industry, are moving into solar, you know, and the
- 12 skills they have, they feel, are transferable, and they are
- 13 diversifying their product mix by being both solar and wind
- 14 companies.
- 15 And in the solar area, there was a lot of discussion
- 16 about PV and solar thermal and the tradeoffs in PVs central vs.
- 17 dispersed, or distributed. And from their perspective, they
- 18 were all Agnostics, you know, in that if you were looking at
- 19 the major solar companies, they would want to have presence in
- 20 all of those in solar thermal, in PV, in PV central,
- 21 distributed, and that none of them were willing to place their
- 22 bets only on one type of technology at this stage because they
- 23 see the technology evolving in a way that, whichever one looks
- 24 most competitive right now, you know, may not win the horse
- 25 race. So it is really developing. And I think, at the same

- 1 time, they are looking at India, China, I mean, a lot of
- 2 real growth markets, so, again, we are very much in a global
- 3 economy with both businesses rapidly evolving, and their
- 4 capabilities, and with the technology evolving. So, there was
- 5 a lot of interesting opportunities, I think, that we are going
- 6 to see in the renewables space in the next five to 10 years.
- 7 COMMISSIONER BYRON: If I may, Commissioner, and I
- 8 apologize to our staff and our participants, sometimes this is
- 9 the only opportunity we all have to discuss some of these
- 10 topics, but definitely storage is heating up, without a doubt,
- 11 and I know you have covered broader subjects than that, but we
- 12 have legislation pending you may not be aware that there is a
- 13 PIER research project with ultracapacitors being used on the
- 14 Sacramento Light Rail System to address that first issue that
- 15 you also discussed, and I am aware that there is a recent PIER
- 16 Report that is just out, I have not had an opportunity to see
- 17 it yet, but it is getting widespread circulation with regard to
- 18 storage and the benefits and costs associated with it. We will
- 19 be discussing that more in committee, I am sure, if not here at
- 20 the dais. And yesterday there was a conference on this
- 21 subject, the storage down in Southern California, I was not
- 22 able to attend, however, my Senior Adviser, Laurie ten Hope,
- 23 participated in a conference panel discussion on this topic,
- 24 and there was a great deal of interest, including
- 25 manufacturers, as well as folks that are involved in the

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- 2 happen in the storage area a little sooner than we might think.
- 3 COMMISSIONER WEISENMILLER: Yeah, thank you.
- 4 COMMISSIONER EGGERT: I have nothing to report.
- 5 COMMISSIONER BYRON: May I add one more item? I
- 6 apologize, perhaps two, Madam Chairman. I had the pleasure of
- 7 attending the Lodi Energy Center Groundbreaking on Monday
- 8 morning, and we both served on that committee. I provided your
- 9 regrets, but this is obviously a very good project, we do not
- $10\,$  get to do these kinds of things very often, it seems. And I
- 11 just wanted to report back to my full Commission that they are
- 12 proceeding with construction of that, I believe it is about a
- 13 296 megawatt project, that is extremely energy efficient.
- 14 There was just nothing that anyone could think of to say
- 15 negative about the project, including the jobs it brings into
- 16 the Central Valley area. And the other thing I think is worth
- 17 mentioning unless I put it off until now because it had not
- 18 come up but we all received notification that this is a new
- 19 era in Energy Commission meetings, that our documents
- 20 associated with the various items are now connected to the
- 21 agenda on the CEC Webpage, and I would certainly like to
- 22 publicly thank staff for accomplishing that. I hope that
- 23 continues, going forward. I cannot wait until we are all on
- 24 video clips and live WebEx going forward, as well. But this is
- 25 a very good start and will help reduce the paper that has to go

- 1 out on all these mailing notifications, that at least
- 2 one or two people are interested in continuing to receive.
- 3 MS. JONES: I just wanted to acknowledge Jennifer
- 4 Jennings, who was the primary person pushing for this and
- 5 getting it to happen, so thank you.
- 6 CHAIRMAN DOUGLAS: Thank you. Good. Thank you,
- 7 Commissioners. I would like to join Commissioner Byron, I
- 8 think we all would, in that we were very pleased to see that
- 9 this could happen, and obviously at a time in which staff is
- 10 firing on all cylinders and working very hard, as well.
- 11 Item 14. All right, Chief Counsel's Report?
- MR. LEVY: Yes, Commissioner. Actually, I have three
- 13 things to bring to your attention. First, I would like to
- 14 request a closed session on Item 14B today.
- 15 CHAIRMAN DOUGLAS: Okay.
- MR. LEVY: The second item is, I would like to
- 17 introduce you to the architect of the Order on Item 11, and I
- 18 would like to ask Tara Garcia to come forward, please. Tara is
- 19 one of our interns, and I guess I will introduce this item by
- 20 explaining to you, I guess, decrying the fact that Jonathan
- 21 Blees, who has been a stalwart member of this Commission, this
- 22 law office, for, oh, decades, has announced his retirement, and
- 23 I will save all his accolades for another day, but one of the
- 24 ones he has recently confided in me that he is most proud of is
- 25 our Summer Associate Program, which he put together. We get

- 1 some pretty stellar Summer Associates here, and it is
- 2 remarkable, and all of us sitting around the room who get the
- 3 opportunity to interview them are very very grateful that we do
- 4 not have to compete with them in law school because we would
- 5 never make it. To give you a little bit of background about
- 6 Tara, she is a member of the United States Marines Reserves for
- 7 six years and served active duty for two years. She was first
- 8 in her class of 888 at Rutgers, where she majored in Poly Sci
- 9 and Criminal Justice. She worked for the ACLU and is currently
- 10 a member of the Federal Society, and she is entering her second
- 11 year of law school at Boalt Hall, U.C. Berkeley, where it was
- 12 just announced that she has been selected for Law Review. It
- 13 was a very complex assignment, especially to give to any long
- 14 term attorney, much less a Summer Associate, and I think you
- 15 see the detail and work that went into it, and I just wanted to
- 16 bring that to your attention.
- 17 COMMISSIONER BYRON: Excellent.
- 18 CHAIRMAN DOUGLAS: Thank you, Mr. Levy, and I would
- 19 like to join you in that we spent long hours hashing over some
- 20 of the issues in that Draft Order, and then sending Tara off to
- 21 research them multiple multiple multiple times, and come back
- 22 with drafts and new drafts, it was very very helpful and
- 23 tremendously good work.
- 24 COMMISSIONER BYRON: Yes, thank you for doing this,
- 25 as well. I would like to correct you maybe on two matters,

- 1 though, one is that Mr. Blees never he would never
- 2 stop you from heaping more accolades, even during Business
- 3 Meetings, and second is, with regard to your distinguished
- 4 career, it is unfortunate that you have the same blemish on
- 5 your record that he does, having attended Boalt Law School, but
- 6 I am sure you will overcome that.
- 7 MS. GARCIA: Thank you, Commissioners and Chairman.
- 8 COMMISSIONER EGGERT: Yeah, and I guess I would just
- 9 join in the congratulations, and as I understand, I think you
- 10 kind of alluded to it, that the reason that the legal team here
- 11 is so good is because it draws from that Summer Associates
- 12 Program, and I think that, along with a number of our other
- 13 Intern Programs, has resulted in us getting some of the best
- 14 and brightest into the agency, so having the ability for us to
- 15 learn about you, and you to learn about us, I think, is one of
- 16 the great benefits of this activity, and am happy to see that
- 17 we are making good use of the Associates.
- 18 COMMISSIONER WEISENMILLER: Obviously, I think I can
- 19 say on behalf of the Siting Committee that, while we receive
- 20 folks' appreciation for the decision, obviously the work was
- 21 done by the legal team that you are looking at, and our two
- 22 advisors, Eileen and Galen, all did a marvelous job, so
- 23 certainly thanks for your help.
- MS. GARCIA: Thank you.
- MR. LEVY: Thank you.

1	CHAIRMAN DOUGLAS: Thank you, Mr. Levy.
2	Item 15. Executive Director's Report.
3	MS. JONES: I do not have anything to report other
4	than to let you know that this is the time of year that we do
5	the Superior Accomplishment Awards, and Sustained Superior
6	Accomplishment Awards. We will begin on the 28 <sup>th</sup> Business
7	Meeting, we know that Commissioners like to acknowledge these
8	people, we will be bringing them into the Commission and
9	presenting their awards.
10	CHAIRMAN DOUGLAS: Thank you, Ms. Jennings.
11	Item 16. Public Advisor's Report.
12	MS. JENNINGS: I have nothing to report, thank you.
13	CHAIRMAN DOUGLAS: Is there any remaining public who
14	would like to make public comment at this time? All right, we
15	will go on to Executive Session, then.
16	(Whereupon, at 11:50 a.m., the business meeting was adjourned.
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